



9.33 Township of Randolph

This section presents the jurisdictional annex for the Township of Randolph.

9.33.1 Hazard Mitigation Plan Point of Contact

The following individuals have been identified as the hazard mitigation plan's primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
William Wagner, Coordinator, OEM 502 Millbrook Ave, Randolph, NJ 973-214-7629 Billwagner105@gmail.com	Richard C. Briant, Deputy OEM Coordinator 502 Millbrook Ave, Randolph, NJ 973-219-3164 rbriant@randolphnj.org

9.33.2 Municipal Profile

The Township of Randolph is characterized as a suburban community located in the west – central portion of Morris County. The twenty-one (21) square mile Township is bordered on the south by Mendham Township, to the west by Chester Township and Roxbury Township, by the Town of Dover, Mine Hill and Rockaway Townships and Victory Gardens Borough to the north and Denville Township, Morris Township and Parsippany Township to the east. According to the U.S. Census, the 2010 population for the Township of Randolph was 25,734.

New Jersey State Highway Route 10 traverses the Township in an east – west direction through the northern part of the community. It provides access to the regional highway network, which includes Interstate Routes 80 and 287 and State Highway Route 46. These other highways are located nearby in the adjacent communities noted above. The Township is also traversed from southeast to northwest by Sussex Turnpike, a two-lane arterial, which is an old colonial route.

Geologically, Randolph is located in the Highlands Physiographic Province. As part of the Appalachian Mountain range, the Highlands are characterized by alternating flat-topped ridges and deep valleys. Travelers to the Township, especially from the east, note the dramatic rise in elevation entering the community via Hanover Road, Sussex Turnpike and Route 10. A similar elevation change occurs when entering the Township from the west on Route 10 from the flat topography of Succasunna. Several Category 1 streams traverse the Township, including the Black River, Mill Brook, India Brook and Jackson Brook as well as high quality streams such as Den Brook.

Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.33-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Block & Lot)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to present					
Fieldfair Corp.	Commercial	1	Block 18.02 Lot 5 Aspen Drive	None	Indoor Recreation Building 27,248 Square Feet
Ridge at Randolph	Residential	25 Lots	Block 146 Lots 72	None	Construction of 25 Lot Subdivision



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Block & Lot)	Known Hazard Zone(s)	Description/Status of Development
			Piersons Hill		
Aashirwad Palace	Commercial	1	Block 184 Lot 8 & 9 South Salem Street	Wildfire: High	3,125 Square Foot Addition to an existing Catering Hall
Randolph Rescue Squad	Commercial	1	Block 42 Lots 107 & 108 State Highway 10	None	Construction of a New Ambulance Response Headquarters
1030 Route 10 West LLC	Commercial	1	Block 18 Lot 13 State Highway 10	None	10,825 Square Foot Construction of a Retail Store and Recital Hall
Known or Anticipated Development in the Next Five (5) Years					
Rose of Sharon	Residential	2	Block 21 Lot 29 Dover Chester Road	None	2 Lot Sub Division 1 COAH Unit
Waseem Enterprises	Commercial	1	Block 184 Lot 7 South Salem Street	None	Convenience Store 2,340 Square Feet
SEA Middlebury LLC/Kozak	Commercial	1	Block 18.01 Lot 1.01 Middlebury Blvd	None	Office/Warehouse Building 35,000 Square Feet
517 Route 10 East	Commercial	3	Block 112 Lot 1 State Highway 10 at Center Grove Road	None	Construction of a Strip Mall & Bank, and Major Remodel of Existing Diner
Shelter Development	Residential	3	Block 111 Lots 19, 20 & 21 Quaker Church Road	None	125 Unit Congregate Care Community
Gordon Randolph MAB	Commercial	2	Block 44 Lots 14 & 14.02 State Highway 10	None	Bank (3,680 SF) & Retail (9,900 SF) Pad Sites
The Learning Experience	Commercial	1	Block 76 Lot 7 & 8 State Highway 10	Wildfire: High	Medical/Office Building 12,500 Square Feet
Amelia Lubrano	Residential	3	Block 116 Lot 13.01 Jodilee Lane	None	3 Lot Subdivision
Envision Properties, LLC	Commercial	1	Block 145 Lot 2 State Highway 10	None	Retail Building 20,875 Square Feet
Habib Kahn	Commercial & Residential	1	Block 34 Lot 6 Dover Chester Road	None	Retail 3,885 SF & 1 Apartment
Grecco Realty	Commercial	2	Block 111 Lots 10 - 16	None	Shopping Center(80,560 SF) & Bank Pad
Japar	Commercial	1	Block 120 Lot 5 State Highway 10	None	Retail/Office (6,050 SF) Addition to Day Care Facility
1.01 Aspen Drive, LLC	Commercial	1	Block 18 Lot 1.01 Aspen Drive	None	Office/Warehouse (40,180 Square Feet)
Skyhill Corp (Skylands)	Commercial	1	Block 42 Lots 5 & 2 State Highway 10	None	Hotel Addition (74 Rooms) To existing Catering Hall
Gangemi	Residential	1	Block 56 Lot 12 Hilltop Drive	None	1 Lot Subdivision
Heritage 55	Residential	31	Block 49 Lot 6 Calais Road	None	31 Age Restricted Town Home Units
The Heller Group	Commercial	1	Block 119 Lot 130 Sussex Trpk & W Hanover	None	Shopping Center 63,300 Square Feet
Gourmet Development Corp	Commercial & Residential	1	Block 35 Lots 1 & 3 Dover Chester Road	None	Addition to Existing Restaurant & Retail (4,970 SF) & 1 Apartment Unit
GRMAE LLC (Rosie's)	Commercial	1	Block 119 Lot 131 Sussex Turnpike	None	Addition to Existing Restaurant
SJC Builders	Commercial	1	Block 44 Lots 8&	None	Office/Day Care Building (24,560 Square



Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Block & Lot)	Known Hazard Zone(s)	Description/Status of Development
			9 State Highway 10		Feet)
1.01 Middlebury Blvd, LLC	Commercial	1	Block 18.01 Lot 1.01 Middlebury Blvd	None	Office/Manufacturing/Warehouse (29,800 Square Feet)
Hebrew Academy Of Morris County	Educational	1	Block 44 Lots 26, 27, 31 & 32 Dover Chester Road	None	New School Building & Athletic Field
Ukrainian Athletic & Educational Association	Commercial		Block 20 Lots 5 & 6	None	Artificial Turf Athletic Fields
Randolph Reality, LLC	Residential		Block 101 Lots 22.01 & 22.02 Brookside Rd & Old Shunpike	None	105 Residential Town Home Units
Elbaum Homes at Pleasant Ridge Inc.	Commercial	1	Block 44 Lot 10 State Highway 10	None	Medical Office Building (22,000 Square Feet)
10 East Realty LLC	Commercial	1	Block 44 Lots 1, 2 & 56 State Highway 10 & Canfield Avenue	None	Car Dealership & Service Center (57,479 Square Feet)

* Only location-specific hazard zones or vulnerabilities identified.

9.33.3 Natural Hazard Event History Specific to the Municipality

Morris County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. For the purpose of this plan update, events that have occurred in the County from 2008 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.33-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
December 26-27, 2010	Severe Winter Storm and Snowstorm	DR-1954	Yes	Snow removal and salting of roads over the three day period, resulted in a claim of \$90,701.09.
August 26 – September 5, 2011	Hurricane Irene	EM-3332	Yes	Large area of power outages for up to 14 days. Most areas were recovered in less than a week. Over 50 % of the roads were closed for a time until power crews could let DPW open the roads. Over 50 telephone poles down. Much flooding in homes due to power failures. Due to the excessive rain, and flooding we had to rebuild man holes and the sewer pump suffered damage from the large rocks and had to replace the grinder blades. Small areas of road edge had to be repaired from run off and collapse; \$86,475.37 for cat a, \$3,596.25 for cat c, \$12,804.66 for cat e, \$5,055.00 for cat g, \$35,110.15 for cat b, & \$19,670.30 for cat f.



Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
October 29, 2011	Severe Storm	DR-4048	Yes	Deposited 14 inches of snow and brought many trees down and electric and telephone wire & poles as well. Resulted in up to two weeks of lost power for some of the area, and just days for others. Over 50 % of the roads were closed due to downed wires and trees; requested \$301,178.18 for cat a, \$11,583.20 for cat g, \$34,978.41 for cat b.
October 26 – November 8, 2012	Hurricane Sandy	EM-3354	Yes	Over 90% of the township was without power, some up to 3 weeks. Many were recovered in less than a week and most in 2 weeks. Schools were kept closed due to the roads being impassable, and the governor's order. Roads were opened as soon as the wires were resolved by the power company. Many out of state power crews were dispatched to the area; requested \$283,356.29 for cat a, \$14,703.73 for cat e, & \$145,295.62 for cat b

9.33.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Township of Randolph. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Township of Randolph.

Table 9.33-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Drought	Damage estimate not available	Frequent	27	Medium
Dam Failure	Damage estimate not available	Occasional	24	Medium
Earthquake	500-year MRP: \$4,506,912 2,500-year MRP: \$91,563,394	Occasional	24	Medium
Extreme Temperature	Damage estimate not available	Frequent	18	Medium
Flood	1% Annual Chance: \$1,781,516	Frequent	18	Medium
Geological Hazards	Exposed to Class A and Class B: \$54,501,024	Frequent	18	Medium
Severe Storm	100-Year MRP: \$4,714,650 500-year MRP: \$32,396,931 Annualized: \$270,220	Frequent	48	High
Winter Storm	1% GBS: \$82,830,212 5% GBS: \$414,151,058	Frequent	54	High
Wildfire	Estimated Value Exposed to Extreme, Very High and High: \$22,067,293	Rare	6	Low



Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Disease Outbreak	Damage estimate not available	Frequent	36	High
Hazardous Materials	Damage estimate not available	Frequent	36	High
Infestation	Damage estimate not available	Frequent	18	Medium

Notes:

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. The valuation of general building stock and loss estimates was based on custom inventory for the municipality.
 High = Total hazard priority risk ranking score of 31 and above
 Medium = Total hazard priority risk ranking of 20-30+
 Low = Total hazard risk ranking below 20
- c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- d. Loss estimates for the flood and earthquake hazards represent both structure and contents.
- e. The HAZUS-MH earthquake model results are reported by Census Tract.

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Township of Randolph.

Table 9.33-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Township of Randolph	72	17	\$200,540.32	1	0	15

Source: FEMA Region 2, 2014

(1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 3, and are current as of 9/30/2014. Please note the total number of repetitive loss properties includes the severe repetitive loss properties. The number of claims represents claims closed by 9/30/14.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(3) The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file.

Notes: FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case.

Number of policies and claims and claims total exclude properties located outside County boundary, based on provided latitude and longitude.

Critical Facilities

The table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1- and 0.2-percent annual chance flood events.

Table 9.33-5. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽¹⁾
No critical facilities are located in the FEMA 1% and 0.2% Flood Hazard Area.						

Source: HAZUS-MH 2.1

Note (1): HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).



Note (2): In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type. Further, HAZUS-MH may estimate potential damage to a facility that is outside the DFIRM because the model generated a depth grid beyond the DFIRM boundaries.

NA Not available

X Facility located within the DFIRM boundary

- Not calculated by HAZUS-MH 2.1

Other Vulnerabilities Identified

According to the 2010 preliminary FEMA Flood Insurance Study (FIS) for Morris County, major flooding in the Township of Randolph is a result of heavy rains during the summer and fall months (FEMA FIS 2010).

9.33.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Township of Randolph.

Table 9.33-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master / Comprehensive Plan	Yes 01/16/2006	Local	Planning Board	2006 Master Plan
Capital Improvements Plan	Yes Annual	Local	Township Council	Capital Improvement Plan
Floodplain Management / Basin Plan	No			
Stormwater Management Plan	Yes 03/21/2005	Local	Planning Board	Storm Water Management Plan
Open Space Plan	Yes 01/03/2014	Local	Environmental Committee	Open Space Program Acquisition and Trail Plan
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	No			
Comprehensive Emergency	Yes	Local	OEM	EOP 2012



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Management Plan				
Emergency Response Plan	Yes	Local	OEM	Part of EOP
Post-Disaster Recovery Plan	No			
Transportation Plan	Yes 01/16/2006	Local	Planning Board	2006 Master Plan Circulation Element
Strategic Recovery Planning Report	No			
Other Plans:	N/A			
Regulatory Capability				
Building Code	Yes	State & Local	Construction Code Official	State Uniform Construction Code Act (N.J.S. 52:27D-119 et seq.)
Zoning Ordinance	Yes 02/17/2004	Local	Township Council	Land Development Ord. Articles III & IV
Subdivision Ordinance	Yes	Local	Township Council	Land Development Ord. Article V
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local		
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local	NJDEP	2009 IBC
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes 05/03/2012	Local	Township Council	Land Development Ord. Article V
Stormwater Management Ordinance	Yes 03/06/2014	Local	Township Council	Land Development Ord. Article VIII
Municipal Separate Storm Sewer System (MS4)	Yes	State, Local	DPW	Ordinance 13-10
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State	Division of Consumer Affairs	N.J.A.C. 13:45A-29.1
Other [Special Purpose Ordinances (i.e., sensitive areas, steep slope)]	Yes (steep slopes)	Local	Township Council	Land Development Ord. Article IV

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Township of Randolph.

Table 9.33-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Township Council



Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Mitigation Planning Committee	No	
Environmental Board/Commission	Yes	Township Council
Open Space Board/Committee	No	
Economic Development Commission/Committee	Yes	Township Council
Maintenance Programs to Reduce Risk		
Mutual Aid Agreements	Yes	Township Council
Technical/Staffing Capability		
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Yes	Land Use Administrator/Township Consulting Engineer
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Township Consulting Engineer
Planners or engineers with an understanding of natural hazards	Yes	Township Consulting Engineer
NFIP Floodplain Administrator	Yes	Township Consulting Engineer
Surveyor(s)	Yes	Township Consulting Engineer
Personnel skilled or trained in GIS and/or Hazus-MH applications	Yes	Land Use Administrator/Township Consulting Engineer
Scientist familiar with natural hazards	Yes	Township Consulting Engineer
Emergency Manager	Yes	Managers Office
Grant Writer(s)	Yes	Managers Office
Staff with expertise or training in benefit/cost analysis	Yes	Township Consulting Engineer
Professionals trained in conducting damage assessments	Yes	Township Consulting Engineer

Fiscal Capability

The table below summarizes financial resources available to the Township of Randolph.

Table 9.33-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact Fees for homebuyers or developers of new development/homes	No
Stormwater Utility Fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other Federal or State Funding Programs	Yes
Open Space Acquisition Funding Programs	Yes
Other	



Community Classifications

The table below summarizes classifications for community program available to the Township of Randolph.

Table 9.33-9. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	N/A	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4	June 2013
Storm Ready	No	N/A	N/A
Firewise	No	N/A	N/A
Disaster/Safety Programs in/for Schools	No		
Organizations with Mitigation Focus (advocacy group, non-government)	No		
Public Education Program/Outreach (through website, social media)	Yes		
Public-Private Partnerships	No		

N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO's Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

The table below provides an approximate measure of Randolph's capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.



Table 9.33-10. Self-Assessment Capability for the Municipality

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High
Planning and Regulatory Capability			X
Administrative and Technical Capability			X
Fiscal Capability		X	
Community Political Capability			X
Community Resiliency Capability			X
Capability to Integrate Mitigation into Municipal Processes and Activities.			X

National Flood Insurance Program

NFIP Floodplain Administrator

Paul Ferriero, Consulting Engineer

Flood Vulnerability Summary

Randolph Township joined the NFIP on December 18, 1979, and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated June 16, 1987. The community's Flood Damage Prevention Ordinance (FDPO), found at Section 22 of the local code, was last updated on April 27, 2006.

As of October 4, 2014 there are 71 policies in force, insuring \$20,150,200 of property with total annual insurance premiums of \$61,902. Since 1979, 17 claims have been paid totaling \$200,540. As of October 4, 2014 there are 3 Repetitive Loss and 0 Severe Repetitive Loss properties in the community.

The Township does not maintain a list of properties that have been flood damaged nor the property owner's interest in pursuing mitigation projects. Hurricane Sandy did not result in any known flooding to structures in the Township. Substantial Damage Estimates have never been made for the Township of Randolph. At this time there are no known interests from property owners to pursue mitigation projects.

Resources

The community FDPO identifies the Township Engineer as the local NFIP Floodplain Administrator, currently Paul Ferriero, for which floodplain administration is an auxiliary duty. Additionally assistance is provided by the Township Engineering and Planning staff as needed.

Duties and responsibilities of the NFIP Administrator are providing residents with information regarding flood plains, reviewing FEMA flood maps, review permits, and perform damage assessments as necessary.

Paul Ferriero feels he is adequately supported and trained to fulfill his responsibilities as the municipal floodplain administrator. An inability to secure adequate funding is a major barrier to running an effective floodplain management program. The Township of Randolph does not currently participate in the Community Rating System (CRS) program but actively beginning the process of joining the program. Paul Ferriero is management Certified Floodplain Manager.



At this time, the Township does not conduct any formal education and outreach to support the floodplain management program. If the Township were able to secure additional funding, increasing the outreach conducted would enhance the program's effectiveness.

Compliance History

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The current NFIP Floodplain Administrator has no knowledge of when the last CAV was performed. The municipality sees no specific need for a CAV at this time.

Regulatory

Local codes and ordinances meet the minimum requirements set forth by FEMA and the State of New Jersey. Floodplain issues are always considered by the Planning and Zoning Boards as part of the adopted site plan and subdivision review process for the Township. The Township of Randolph does not participate in the Community Rating System (CRS) program but is beginning the process of joining the program.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

Planning

The Township of Randolph adopted a Master Plan in 2005. The 2005 Master Plan identified the following goals related to hazard mitigation:

1. Discourage development on the Township ridge lines and steeply sloped areas. Rooflines should be kept below the ridge line to preserve distant views; significant vegetation along the ridge lines should be maintained.
2. Protect the Township's critical water supply for future needs, in accordance with the principles of Federal and State laws.

Regulatory and Enforcement

The Borough's Land Use Ordinance, Section 22 Flood Management consider flood hazard risks. The Township Planning Board uses the advice of Township professionals and the Emergency Management Coordinator to guide their decisions with respect to natural hazard risk management. The Planning Board requires developers to take additional actions to mitigate flood hazard risk.

Fiscal

Currently, the municipal/operating budget does not include line items for mitigation projects or activities. The Township does have a Capital Improvements Budget which includes budget for mitigation-related projects. The Township has planned for a number of pump station and sewerage/water infrastructure improvements totaling \$100,000.



9.33.6 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2010 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Table 9.33-11. Past Mitigation Initiative Status

Description	Status	Review Comments
Randolph 1: Elevate Jersey Central Power and Light sub-station to mitigate risk of flooding.	No Progress	Discontinue
Randolph 2: Incorporate LED lights and backup power to Sussex Turnpike at all intersections.	In Progress	Include in 2015 HMP
Randolph 3: Incorporate LED lights and backup power to NJ Route 10 State Highway at all intersections.	No Progress	Include in 2015 HMP
Randolph 4: Backup power (generator) for Fire Company 3.	In Progress	Discontinue
Randolph 5: Backup power (generator) for Fire Company 5.	In Progress	Discontinue
Randolph 6: Backup power (generator) for Randolph Rescue Squad at 790 Route 10.	In Progress	Discontinue
Randolph 7: Backup power generator) for Randolph Rescue Squad at Dover-Chester Road.	No Progress	Discontinue
Randolph 8: Backup power (generator) for India Brook Village at 34-36 Calais Road.	Complete	Discontinue
Randolph 9: Acquisition/elevation of repetitive loss property on Franklin Road.	In Progress	Include in 2015 HMP
Randolph 10: Develop all-hazards public education and outreach program for hazard mitigation and preparedness.	In Progress	Include in 2015 HMP
Jennifer Avenue and Route 10 - West	New	Include in 2015 HMP
Sussex Turnpike underpass at Route 10	New	Include in 2015 HMP

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The municipality has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2010 Plan:

- None identified

Proposed Hazard Mitigation Initiatives for the Plan Update

The Township of Randolph participated in a mitigation action workshop in January 2015 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation



Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.33-12 summarizes the comprehensive-range of specific mitigation initiatives the Township of Randolph would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.33-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.33-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
1	Incorporate LED lights and backup power to Sussex Turnpike at all intersections.	Existing	Flood related power loss	3,4	Township and County	High Reduction in costs and increased safety	High \$500.00 per light	Transportation Grants, NJDOT	Short term DOF	Medium	SIP	PR
2	Incorporate LED lights and backup power to NJ Route 10 State Highway at all intersections.	Existing	Flood related power loss	3,4	Township and County	High Reduction in costs and increased safety	High \$500.00 per light	Transportation Grants, NJDOT, HMA Grants	Short term DOF	Medium	SIP	PR
3	Acquisition/elevation of repetitive loss property on Franklin Road.	Existing	Flooding	1,2,3	Township and County	High Reduction in costs and increased safety	High	HMA Grants	Short term DOF	Low	SIP/NSP	PP
4	Develop all-hazards public education and outreach program for hazard mitigation and preparedness.	Existing	All hazards	1,2,3,4	Township and County	High Reduction in costs and increased safety	Low	Municipal Budget, EMPG	Short term DOF	Medium	EAP	PI
5	Flood Warning signage for Jennifer Avenue and Route 10 - West	Existing	Flooding	1,2,3	NJ DOT	High Reduction in costs and increased safety	High	Transportation Grants, NJDOT, County	Long Term DOF	High	SIP/NSP	PP
6	Flood Warning signage for Sussex Turnpike underpass at Route 10	Existing	Flooding	1,2,3	NJ DOT	High Reduction in costs and increased safety	High	Transportation Grants, NJDOT, County	Long Term DOF	High	SIP/NSP	PP

Notes:

Not all acronyms and abbreviations defined below are included in the table.



**Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.*

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
NJDEP	New Jersey Department of Environmental Protection
NJOEM	New Jersey Office of Emergency Management
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

FMA	Flood Mitigation Assistance Grant Program
HMGP	Hazard Mitigation Grant Program
PDM	Pre-Disaster Mitigation Grant Program
RFC	Repetitive Flood Claims Grant Program (discontinued 2015)
SRL	Severe Repetitive Loss Grant Program (discontinued 2015)

Timeline:

Short	1 to 5 years
Long Term	5 years or greater
OG	On-going program
DOF	Depending on funding

Costs:

Where actual project costs have been reasonably estimated:

Low	< \$10,000
Medium	\$10,000 to \$100,000
High	> \$100,000

Where actual project costs cannot reasonably be established at this time:

Low	Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
Medium	Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
High	Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

Low=	< \$10,000
Medium	\$10,000 to \$100,000
High	> \$100,000

Where numerical project benefits cannot reasonably be established at this time:

Low	Long-term benefits of the project are difficult to quantify in the short term.
Medium	Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
High	Project will have an immediate impact on the reduction of risk exposure to life and property.

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)- These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.



- *Property Protection (PP)* - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.
- *Public Information (PI)* - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.
- *Natural Resource Protection (NR)* - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.
- *Structural Flood Control Projects (SP)* - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.
- *Emergency Services (ES)* - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities



Table 9.33-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Community Objectives	Total	High / Medium / Low
1	Incorporate LED lights and backup power to Sussex Turnpike at all intersections.	1	1	-1	1	1	0	0	1	0	0	0	0	0	0	4	Med
2	Incorporate LED lights and backup power to NJ Route 10 State Highway at all intersections.	1	1	1	0	-1	0	0	1	1	0	0	0	0	0	3	High
3	Acquisition/elevation of repetitive loss property on Franklin Road.	-1	1	-1	0	0	0	0	0	0	0	0	0	0	0	-1	Low
4	Develop all-hazards public education and outreach program for hazard mitigation and preparedness.	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	Med
5	Jennifer Avenue and Route 10 - West	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	High
6	Sussex Turnpike underpass at Route 10	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	High

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.



9.33.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.33.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Township of Randolph that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Township of Randolph has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.33.9 Additional Comments

None at this time.



Figure 9.33-1. Township of Randolph Hazard Area Extent and Location Map 1

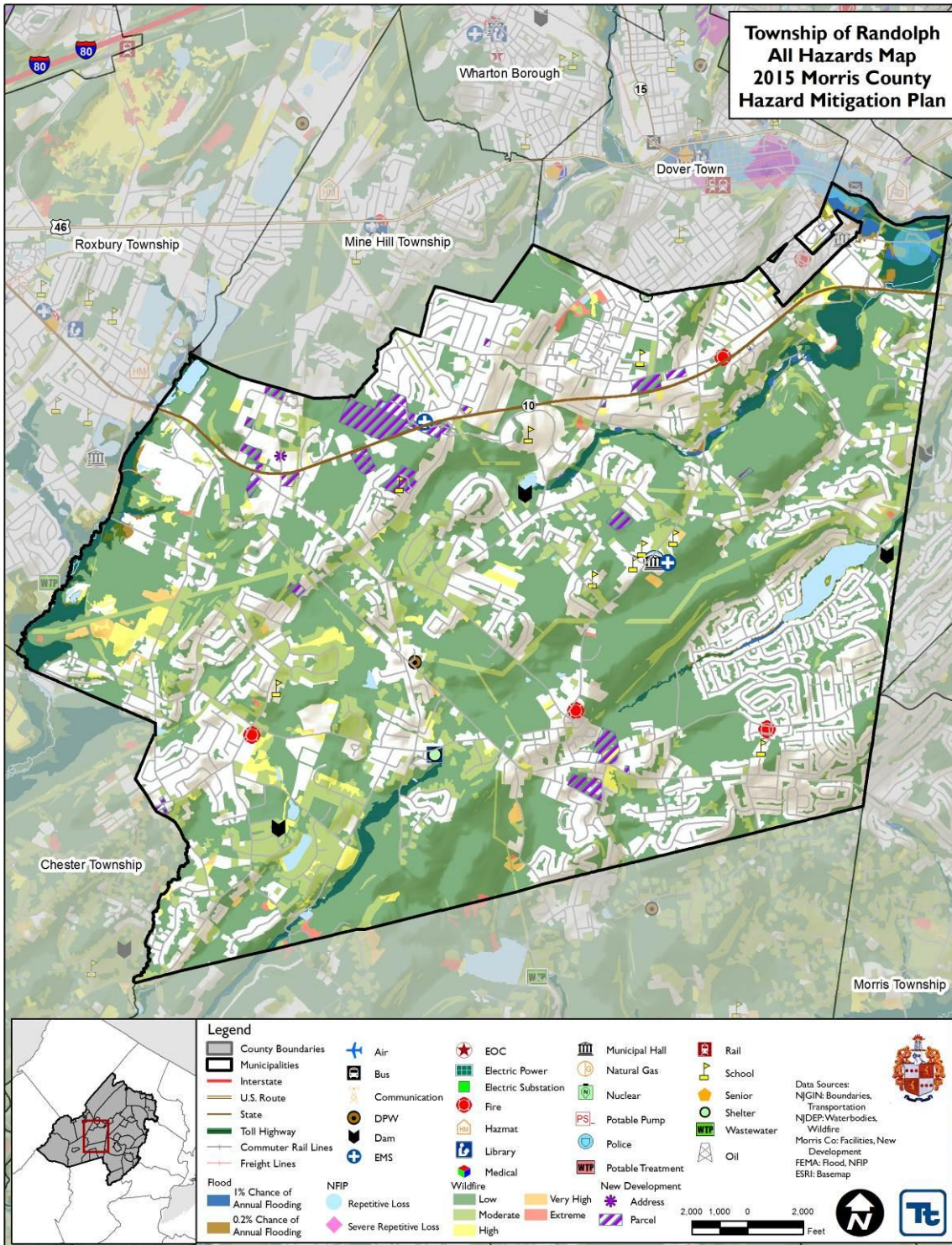
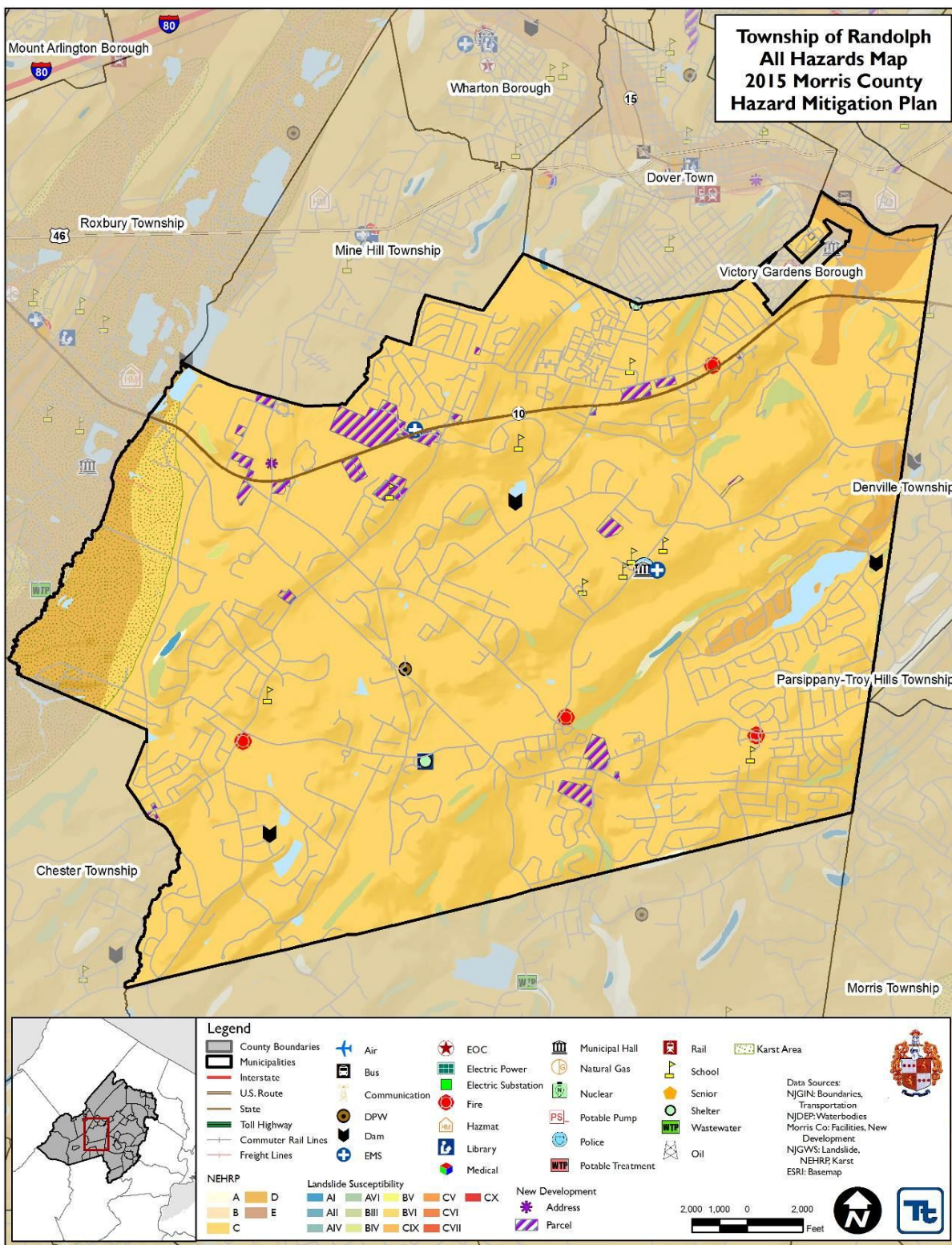




Figure 9.33-2. Township of Randolph Hazard Area Extent and Location Map 2





Name of Jurisdiction: Township of Randolph

Action Number: Randolph 1, 2

Mitigation Action/Initiative: Backup Capability

Assessing the Risk	
Hazard(s) addressed:	Install Backup Capability to the Millbrook & Sussex Intersection and at Route 10
Specific problem being mitigated:	When power is out, traffic is disrupted on this very busy road. By having the working traffic signals, all traffic flows normal.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Install back up power capacity
	2. Do nothing
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Coordinate with Morris County Engineering to update this intersection with back up power capability.
Action/Project Category	SIP
Goals/Objectives Met	3, 4
Applies to existing, future, or not applicable	
Benefits (losses avoided)	High
Estimated Cost	\$500.00 per intersection
Priority *	MEDIUM
Plan for Implementation	
Responsible Organization	Randolph Township with approval from the County of Morris
Local Planning Mechanism	Discuss with Morris County Engineering
Potential Funding Sources	
Timeline for Completion	Short Term DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)



Name of Jurisdiction: Township of Randolph

Action Number: Randolph 1, 2

Mitigation Action/Initiative: Backup Capability

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Allow traffic to flow normally
Property Protection	1	Traffic backups prevent emergency vehicles from getting to a scene
Cost-Effectiveness	-1	Very low under \$500.00
Technical	1	A simple switch and an electrical chord
Political	1	We already have updated lights on other county roads
Legal	0	No issues
Fiscal	0	
Environmental	1	Keeps traffic moving and pollution down
Social	0	
Administrative	0	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
Total	4	
Priority (High/Med/Low)	Medium	



Name of Jurisdiction: Township of Randolph
Action Number: Randolph 3
Mitigation Action/Initiative: Acquisition

Assessing the Risk	
Hazard(s) addressed:	Repetitive flooding on Franklin Road
Specific problem being mitigated:	Flooding in the area and damage to homes
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Acquire Properties
	2. Elevate Properties
	3. Do nothing
Action/Project Intended for Implementation	
Description of Selected Action/Project	A few properties have had repetitive flooding. Acquire said properties as grant opportunities and willing sellers become available.
Action/Project Category	SIP
Goals/Objectives Met	3, 4
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	Low
Plan for Implementation	
Responsible Organization	Administration
Local Planning Mechanism	
Potential Funding Sources	HMA grants
Timeline for Completion	Long Term DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project;

* Refer to results of Prioritization (page 2)



Name of Jurisdiction: Township of Randolph

Action Number: Randolph 3

Mitigation Action/Initiative: Acquisition

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	-1	
Property Protection	1	This will protect flood victims
Cost-Effectiveness	-1	Funding not available
Technical	0	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	0	
Administrative	0	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
Total	-1	
Priority (High/Med/Low)	low	



Name of Jurisdiction: Township of Randolph
Action Number: Randolph 5,6
Mitigation Action/Initiative: Flood warning signage

Assessing the Risk	
Hazard(s) addressed:	Flooding of Sussex Turnpike & Route 10 Underpass residual accidents
Specific problem being mitigated:	Flooding or roadway during heavy rains.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Flood warning detection and signage for listed locations
	2. Elevate overpass and roadway
	3. Do nothing
Action/Project Intended for Implementation	
Description of Selected Action/Project	Install a flood detection sensor and warning lights at underpasses to warn approaching vehicles of hazard.
Action/Project Category	SIP
Goals/Objectives Met	3, 4
Applies to existing, future, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Township Engineering, Morris County and State of New Jersey DOT
Local Planning Mechanism	
Potential Funding Sources	NJ Transportation Grants, NJDOT
Timeline for Completion	Short Term DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)



Name of Jurisdiction: Township of Randolph
Action Number: Randolph 5,6
Mitigation Action/Initiative: Flood warning signage

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Fire Department responds to the scene and removes the people from the vehicle. Police department blocks off the road, reopens when the water goes down.
Property Protection	1	Vehicles are damaged from the water people stressed from the ordeal.
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	0	
Fiscal	0	
Environmental	0	
Social	0	
Administrative	0	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
Total	2	
Priority (High/Med/Low)	High	